2: Murra E-4 (no date) 1943 SD6 Cayapa SD6

as that of the plantain. Almost every family owns its cane mill and distillery, which are supplied by the omnipresent canefields.

With all this emphasis on agriculture, the *Cayapa* are, nevertheless, a jungle people, skilled hunters of many species of rodents, deer, felines, peccaries, armadillos, and birds. Life at the riverside encourages and is encouraged by dependence on fish, crustaceans, shellfish, and crocodile eggs. Under aboriginal conditions the *Cayapa* were probably never hungry.

Hogs and chickens are now kept everywhere. Dogs are not conspicuously reported.

Food is mostly boiled, though frequently meat will be broiled or baked. Surpluses are dried and smoked.

HOUSES AND VILLAGES

Though maps traditionally locate *Cayapa* "villages," these are nothing but agglomerations of three or four houses and a church. The houses stand empty most of the year and are used only at holidays when the priests visit the *Cayapa*.

The actual habitations of the people are spread through the jungle, always at riversides (pl. 57, *top*) and usually isolated from one another by fields or even uncleared stretches. The houses stand on high poles 6 to 12 feet off the ground and are reached by removable ladders. The roof is thatched with palm leaves (pl. 57, *center*), and the rectangular house is virtually unenclosed. Sometimes the house floor is separated into two parts, one for cooking, the other for sleeping and eating. One chief had a large house (pl. 57, *bottom*) which could seat 40 people and which had more than two "rooms." The furniture is scanty: hammocks are used for sitting and sleeping, and wooden seats are sometimes found. An attempt by Barrett to correlate these seats with the famous stone seats of Manabi (Handbook, vol. 2, p. 780) seems very inconclusive.

In addition to permanent houses, small temporary ranchos are sometimes built when people are far from home. The houses in the "village" are standard structures, but the church follows Spanish ways: it rests on the ground and has walls.

CLOTHING AND ADORNMENT

Although *Cayapa* tradition records a period when the people wore blankets and even ponchos, today their clothes are scanty (pl. 59, *bottom*). The men wear a tight, small, white garment, made like bathing trunks, and a thin gaudy shirt of calico, with short and very tight sleeves. On festive occasions vests of European cut and manufacture are frequently donned over the shirt, and so are felt fedoras.

Women wear a long skirt of native cloth, girded with a narrow fringed belt. As in the Highlands, several skirts of different weights are sometimes worn. Head, shoulders, and chest are usually left bare.

3: Barrett E-5 (1903-1909)1925
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At an early age the girls are instructed in household duties of all kinds, and often begin to spin and weave, as well as to make pottery, basketry, and other articles, at the age of five or six years. They also take a hand in agriculture when very small. As they grow older and become more proficient in these various arts, they enter more and more into the regular daily work of the home, until they finally marry, which they usually do at an early age, often at about seventeen or eighteen years.

The daily life of the men is also a busy one. They do their share of the work in the fields, besides being industrious hunters and fishermen. They are expert woodworkers, making very excellent canoes, paddles, benches, images used as toys by children, musical instruments, certain cooking utensils, and various other objects of wood. They make and tend the fish corrals as well as set the seines when the water is in a favorable condition to divert fish to certain places. In addition to trapping and netting fish, they also do much fishing with hook and line. They hunt a great deal and procure a very important part of the food supply in that way, for the jungle abounds in many kinds of game. When about the house, they are, like the women, almost always busy at something, as adzing a canoe, weaving a net, or doing some one of the many kinds of work which fall to the man's lot in the Cayapa division of labor. Since the introduction of needles and thread among the Cayapa, the men have taken up sewing and have become very efficient tailors for their simple needs.

3: Barrett E-5 (1908-1909)1925
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226 The Cayapa make frequent journeys to the ocean, chiefly for the purpose of securing shellfish and crabs, which are abundant along the beaches about the mouth of the river. There are several species of clams and mussels, as well as oysters in large numbers. Also crabs of several species are very abundant, and are captured usually by digging out their burrows. Both the shellfish and the crabs are brought alive up the river, the crabs being confined in coarse baskets. Oysters are usually heated over coals sufficiently to cause the shells to open, and are eaten directly from the shells with a bit of salt or lemon; but clams and mussels are generally boiled. Crabs also are almost always boiled, although sometimes they are roasted.

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[263]

226 Inland, along the banks of the Rio Cayapas and its tributaries, are obtained three other foods of the same class. In the wet soil of the jungle live large numbers of a small, bright-red land crab, called nē'lû, or, more specifically, kaia'pa nēlû. This crab has one very large arm, which is the only part used as a food. The crabs are caught in great numbers, and the large arm is removed and roasted. In the waters of these streams are also large numbers of a small species of lobster or crayfish, called pi'cû, which is considered an excellent food. It is caught with a special dip-net, called cia, used almost exclusively for this purpose. The third food of this class is likewise obtained from the rivers. It is a very small bivalve, resembling a miniature mussel such as is found in the ocean, and is gathered at certain points along the streams where the rock walls of the banks or where bedrock affords convenient lodgment.

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[227]

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made more effective, in case the single log above mentioned is not sufficiently heavy, by superimposing upon it another which not only adds weight and enables the trap to kill larger animals, but accelerates its action and diminishes the possibility of the game escaping after the trap is sprung but before the log can fall. Such a second log is usually a foot or so shorter than the other.

Fishing

The numerous streams of the Cayapa region are well stocked with various kinds of fish, many of which are used as food by the Indians. They are at present caught by six different methods. There are three types of nets, the "re," or large set-net, the atarraya or conical casting-net, and the small dip-net, used incidentally in connection with the set-net. These are all used to a considerable extent, especially the set-net; but the "corral," or impounding trap, the pole and line, and the "gig," or fish-spear, are much more generally used. Of these six devices, four only, the set-net, the dip-net, the corral, and the gig, appear to be of aboriginal origin.

The re, called in Cayapa wa'kū, is, like the other two nets used by the Cayapa, made of pita fiber string and is used especially in catching a very excellent species of shad (Spanish, sabalo), called by the Cayapa awī'k. For this purpose it is made with a mesh of about three inches, and varies in length from about twenty to sixty feet according to the width of the particular estero in which it is to be used. Usually near a house there are one or more esteros where shad are fairly abundant,

J: Barrett E-5 (1908-1909)1925
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226 but they cannot be taken at all times. When the river is in flood, the shad go in large numbers up the estero in search of certain vegetal foods which are made available by the rise of the water, and it is customary to set a net across the mouth of an estero at about the time the flood commences to recede. As the water level 226 lowers, the fish endeavor to return to the main stream, 227 but are impounded near the mouth of the estero by the net, which is securely fastened at both ends and is weighted down with stone sinkers called cü'pūka or cü'pūka (literally stone), along the bottom, these being wrapped in the tough leaf called ü'tya hakā to prevent them from wearing the cords by which they are tied to the edge of the net. These sinkers are usually water-washed pebbles ellipsoidal in form and weighing not more than a few ounces each. The sinkers are trampled into the mud in order that no openings are left through which the fish may escape into the main stream. The upper edge of the net is kept up to the surface of the water by means of floats, called wailā de''pūka, consisting of variously shaped blocks of balsa, a species of very light wood, and is supported also by one or more vertical poles stuck securely into the mud at the bottom of the estero and to which the upper edge of the net is tied. This last precaution is necessary because with the recession of the water there comes a considerable amount of small drift-wood and leaves which would gather about the floats of the net and finally sink its upper edge, at least in places, thus allowing the fish to escape.

226 When the water has sufficiently subsided so that the

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fish have nearly all returned to the mouth of the estero, 226
the owner of the net, accompanied by all available
members of his family and by any friends present, goes
to the estero with a second net of the same kind. This
net is carried up-stream to a point where the water is
very shallow; it is then placed across the stream and
moved carefully down as a seine, the fish being driven
before it. In this way the fish are at last impounded
between the two nets in a space from twenty to twenty-
five feet long and of the width of the estero. Ordinarily,
in bringing the net down to this point, a considerable
number of fish are caught by hand, for while two or
three persons attend particularly to the moving of the
net, others are diving in the water ahead of it and catch-
ing by hand any fish which may have sought refuge in
hollow logs or in crevices in the banks. Also many are
caught as they strike the seine in an attempt to run
back up-stream. Such a fish will usually push several
times in succession at about the same point in the net,
thus giving to one of the fishermen ample indication
of its whereabouts. As each fish is brought up by a
diver or is caught by one of those tending the seine,
the top of its head or the back of its neck is bitten, thus
stunning it, and it is either thrown into a canoe kept at
hand for the purpose, or cast upon the bank. When
the nets are finally brought close together so that the
remaining fish are impounded in the small space above
mentioned, conical dip-nets are used by the divers to
catch them. As the dip-nets are brought up, they are
passed to a man in the canoe, who empties them of the

3: Barrett E-5 (1908-1909)1925
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226 fish and kills with a club the larger ones which might
227 flop over the gunwale. Finally, all the fish possible having been taken in this manner, the set-net and the seine are taken up and brought back to the house. 227 Both are carefully washed and cleaned at the river after having the stone sinkers removed, and are then hung up on a long bamboo pole, especially provided for this purpose, over the drying platform at the side of the house. When thoroughly dried these nets are each carefully folded and then compactly twisted, in such fashion as is shown in pl. CXX, 2. The stone sinkers are unwrapped and stored away in a basket until again needed. The floats used on the net here shown measure about four by eight inches by three-quarters of an inch. In many other cases the floats are of various other forms. They are quite often cylindrical.

226 Nets called atcí wa'kû, of the same kind but with
226 smaller meshes, are made for catching certain other species of fish. In general, however, the use of the seine is confined largely to catching shad, as above described.

226 The atarraya, which name is corrupted by the Cayapa
227 into ata'la, is a large conical casting net heavily weighted
226 about its mouth with lead or, when this is not available, with stone sinkers. In pl. CXX, 1, is shown one of these nets weighted with lead sinkers weighing in the aggregate about twenty-five pounds. In this illustration it is shown folded at about its middle, while the upper end or apex of the cone is wrapped around the remainder
224 of the net. To the point of the cone is attached a long, heavy cord, the end of which is held in the hand when

3: Barrett E-5 (1908-1909)1925
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the net is thrown. To cast this net well requires much practice. It is always done by a man standing in the prow of a canoe propelled by a paddler at the stern. He watches the water and throws the net at any point where the fish appear to be moving or jumping. In making such a cast, the line and the upper part of the net are coiled in the left hand, while one edge of the sinker-lined opening is caught between the teeth. The greater part of the weight of the sinkers is swung by the right hand until a sufficient motion has been secured to give force to the cast. Then the coiled net and cord are liberated by the left hand at the same moment that the right hand throws the heavy weight of sinkers. The edge of the weighted opening is held between the teeth an instant after the cast is made, thus causing the net to open in a wide circle as it descends through the air. The heavy weights sink the entire net very rapidly in the water, thus imprisoning any fish which are within the circumference described by the sinkers and the edge of the net. The net is allowed to sink to the bottom and is then pulled in: this must be done very carefully and in such manner as not to raise the sinkers from the bottom of the stream too suddenly. They must be dragged along until they have all come together in one point, and the fish, if any have been imprisoned, have been driven into the upper part of the net. The net is then carefully pulled up beside the canoe, the sinkers meanwhile holding the opening sufficiently well closed to prevent the escape of the catch. By simply pulling on one side of the net, the

3: Barrett E-5 (1908-1909)1925
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226 fish are allowed to fall into the bottom of the canoe or into a basket, and the net is then ready for a second cast. This net serves only for taking small fish, and is not very much used by the Cayapa. Apparently their [177] knowledge concerning this form of net was acquired from the negroes. At any rate their knowledge of its use is comparatively recent.

226 227 286 The dip-net, called by the Cayapa cī'a, above referred to, is a small-meshed conical net and is used not only for fishing, as above described, but especially is it employed for catching the small lobster, or crayfish, called by the Cayapa pī'cū or a'bīcū, which is so abundant along the banks of the river and especially along the banks of the esteros tributary to the river. The opening of this dip-net is held in shape by a hoop made of a pliable vine simply bent around and its two ends tied firmly together. Thus one end of the hoop is rounding and the opposite end, the one used as a handle, is fairly sharp-pointed. The dimensions of this opening are perhaps fifteen to twenty inches by thirty to thirty-six inches, and the distance from the rim to the point of the cone of the net itself is from twenty-four to thirty inches.

All nets are made from pita-fiber string, the details of the making of which, as also of net-weaving, are treated in the discussion of cordage and netting.

226 A corral, or impounding trap, such as that shown in pl. LXVII, is used by almost everyone living along the tidewater portion of this river system; and, owing to the level character of this coastal plain, the tidal rise

3: Barrett E-5 (1908-1909)1925
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IMPOUNDING TRAP FOR SHAD

[p. 126 (1)]

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and fall are felt many miles from the river mouth. The success of this form of trap depends particularly on the peculiar habits of the shad. As above stated, this fish subsists entirely on vegetal foods, which it hunts along the river banks at high tide and usually at night, keeping at other times in the deeper midstream waters. At times of flood, as mentioned in speaking of the use of the set-net, the shad abandon the main stream and visit the esteros. Obviously, therefore, the corral is a device suited especially to those parts of the river where the water level rises and falls with the ocean tide, and obviously also it is of no service when the river is in flood.

A point properly protected from strong currents at times of flood, and otherwise suitably situated along the river-bank, is selected, and a pole, to which some plantains or other vegetal foods are attached, is placed in the water near the bank in order to give assurance that the point selected is one specially frequented by shad. The shad come almost exclusively at night, and if it is found that the bait has been taken on several successive nights, it is selected as the site for a corral. Care must be used in selecting such a site, for if it be chosen along a part of the river-bank where the current is rapid, the corral is likely to be carried away during a freshet. A desirable site having been found, two sides are built by setting firmly in the mud bamboo or palm-wood sticks, these being bound firmly together by means of cross-bars running horizontally and braced by others extending diagonally. These two sides proper are

3: Barrett E-5 (1908-1909)1925
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●226 usually much wider than the third side, or that which faces the river, and which may be termed the end of the corral. The opposite sides are not parallel, but converge as they leave the bank. The fourth side of the trap is formed by the river-bank. The three sides which project into the water are of sufficient height that they emerge from four to six feet above the surface at high tide. The front side or end of the corral is often very little wider than the gate situated at its bottom. This opening varies in size according to the dimensions of the corral, but it is always at least three feet wide and equally high. Two smooth, straight poles are placed vertically just inside this front wall, and upon these the gate, which is usually made of palm-wood poles bound by pitigua to cross-bars, slides up and down. The gate is always weighted with heavy stones, which cause it to drop quickly, and it is held up and open by a pitigua cord that passes over a rounded transverse bar overhead and then back to a blind on the bank from which the trap is sprung. At a point just outside the gate there is usually placed a vertical pole to which is attached a small amount of bait which serves to entice the fish to the gate itself, through which they later enter the trap where they espy more bait fastened to two or more vertical poles at some distance in from the gate. These poles, being quite slender, shake easily as the fish nibble at the bait, and it is the motion of the upper end of the pole that gives warning of the presence of the fish to the watcher on the bank. The corral is usually watched only at comparatively high tide, for

3: Barrett E-5 (1908-1909)1925
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it is then that the shad travel near the bank in search of food. Furthermore, the opening of the trap is ordinarily somewhat above water at low tide, as is shown in the illustration above mentioned, the photograph for which was taken at very low tide and when the whole corral was entirely above the water line. The greatest of care must be exercised in watching one of these corrals, since the fish are easily alarmed and any noise or unusual movement about the corral is likely to frighten them away. Frequently, in order to render the surroundings more realistic and natural, some palm-leaves or some branches of trees are placed in or along the bank about a corral. The trap being sprung, the fish are impounded until the tide ebbs, when they are left in very shallow water, or even in the mud itself, and may be easily taken from the corral. The catch in one of these corrals is, of course, very uncertain, but frequently several fish are taken at one time, and while shad are especially sought, various other fish are impounded as well.

Fish-spears or gigs are of two kinds. That at present in use for large fish is of the ordinary trident form, called a'sta in Cayapa, and is strictly an introduction of civilization. Its head nowadays is made by blacksmiths at the coast. The pole on which this head fits is from ten to fifteen feet in length. One end of the pole is split and the flat tang of the spearhead is inserted, the joint being securely wrapped with pita string, which is water-proofed and protected by means of beeswax. As an additional precaution against loss,

3: Barrett E-5 (1908-1909)1925
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227 several stout strands of pita cord are fastened securely to the head at the point where the prongs branch off from the tang, and these are attached to the pole at a point a few inches up from the head. Thus in case the head should pull out of its socket it is still securely fastened to the pole and cannot be lost.

The other form of fish-spear, called in Cayapa pūtyū'lya, is made usually with a long, slender, palm-wood pole not more than half an inch in diameter, the prongs being made from heavy fish-hooks which have been straightened out. The point of the pole is fairly flat and about an inch in width. From two to four straightened fish-hooks are bound to this flat point by means of pita cord, which is then thoroughly covered with brea to make it impervious. This form of gig is 226 suitable only for catching very small fish. While the 227 gigs of the present time are thus made of iron, the [177] aboriginal spears were similarly shaped but were provided with points of hard palm-wood.

227 Another gig, made in the same manner as the last, 225 but usually with a heavier pole and heavier points, is used for spearing water-turtles, which are fairly abundant here. This gig is called pūtyū'lya, as well as hwe'ska or fe'ska, and the only marked difference between it and the fish-gig just described is that its points have no barbs. It is said by the Indians that it is impossible to pierce the shell of a turtle with a barbed gig, but that the barbless point passes through the shell easily. The terrapins, or land turtles, having harder shells, are always caught by hand.

3: Barrett E-5 (1908-1909)1925
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At the present time the hook-and-line is very much used in fishing, though this was introduced by the whites. Strong, slender, fish-poles, called wañgū-tca'lī, seven to ten feet in length, are made from the upper branches of the large bamboo. They are gathered when thoroughly matured but while still green, and are hardened and straightened by heating. The lines, called wañgū-tcū'a, or sañ-dō'a, are made of native pita string and are usually quite fine. The strength of the pita fibers makes it possible to use a very fine line for comparatively large fish. Such a fish-line, provided with a special pottery sinker and an ordinary steel fish-hook, is shown in fig. 9; it is wound in this case on a cylindrical piece of balsa. This line is called tcūndyē'pū and is used in the hand after the fashion of a troll. In case it should be dropped or pulled overboard, it is saved by means of the balsa float. Ordinarily all lines are provided with lead sinkers, but the pottery cylinder especially made as a sinker is an old type and was formerly very much used. Hooks, called weñgō'la, are now obtained from traders at the coast, although it is

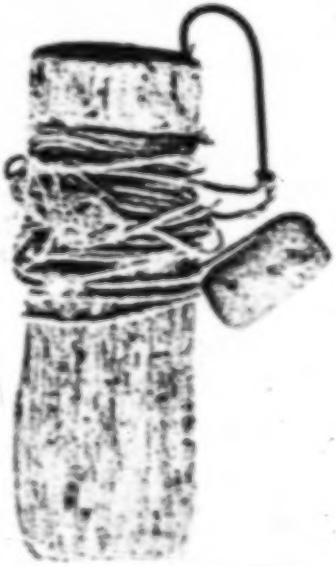

FIG. 9.—Fish-line with pottery sinker

3: Barrett E-5 (1908-1909)1925
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said that when this method of fishing was first introduced through contact with the early Spaniards, crude hooks were fashioned by hammering out pieces of iron.

226 At the present time this method of hook-and-line fishing is so much in vogue that almost every man has his special little canoe and a special short paddle which are used almost exclusively for fishing. It is customary to paddle for some distance against the tide or current and then to fish back down with the current along the bank. In this way little effort is required in paddling, and a sculling motion of the paddle with the left hand is sufficient to keep the canoe in its desired course. With [227] a pole and line go a small, hemispherical, calabash dish of angle-worms, a small bottle-shape basket (pl. XCIII, 3) of grasshoppers, or a calabash of a certain small reddish fruit, all of which are used as bait, each according to the kind of fish sought.

On rare occasions the trot-line, called weñgûtcû'a (?), such as that shown in pl. CXIX, 1, is used. The main line, called señgi'ri, is made usually of the coarser string fiber called by the Spanish term cosadera, while the small "leaders," called simply sañdō'a, to which each separate hook is attached, are made of pita string.

War

721 The Cayapa maintain that in ancient times they rarely went to war, and then only on the greatest provocation, as, for instance, when they were harrassed by the former inhabitants of their present domain until forbearance was no longer possible and they descended from their

men, and occasionally only one shotgun is available to share among them. 224

Fishing is an important adjunct to the dietary pattern. Fish are dynamited, netted, speared, trapped, drugged, and hooked. Often a man or boy will work his canoe up-stream and then drift slowly down while he plays his hook and line which are tied to a light pole. The fisherman baits his hook with a lively grasshopper, drops his line into the water, then holds his arm motionless except for a slight movement of his wrist which causes the line to move with a sinusoidal motion. This favorite method can only be used when the river is very low. At these times, in the evening, three men or boys go out in a canoe moving slowly along the bank. One man paddles, another holds a flashlight or a pressure lantern, and the third man stands ready with a fish spear. The light attracts multitudes of fish, and the haul is invariably a huge one. Lobster can also be easily trapped when the river is low. A lobster trap, called catanga is baited with plantain. It is set under water alongside a bank that has some protuberance, such as a pile of driftwood. The mouth of the trap is placed so it faces

226 [262] [825] [416] [373] [824]

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down stream because the lobsters tend to move against the current. The lobster easily enters the mouth which consists of a conical chamber made of pointed bamboo. When the lobster enters the bait chamber, it is prevented from leaving by the pointed ends of the small section of the cone. The trap is tied to a long pole. Traps are set at intervals along the river, and they are visited every morning. There are no restrictions as to site location, but once a trap is set, no one else sets one next to it.

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While the Cayapa derive most of their subsistence from hunting, gathering, fishing, and planting, they are also engaged in commercial planting of bananas and as the market expands the Cayapa are becoming more and more peasant like.

Tribal Peasants

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Wolf in his discussion of "Types of Latin American Peasantry" marks off two main categories, the corporate peasant community characteristic of the highlands and the open peasant community that characterizes the tropical lowland areas.